

# **State of New Hampshire Department of Transportation**

**Capital Budget Committee  
HB25 Presentation  
March 15, 2017**

**STATE OF NEW HAMPSHIRE**  
**CAPITAL IMPROVEMENT PROJECT REQUEST**  
**FISCAL YEARS 2018-2019**

*General Fund HB25*  
*Section 1 XIX-A*

FORM 1A

PRIORITY # 1

CODE	NAME
AGENCY 096	Department of Transportation
ACTIVITY / DIVISION 964010	Division of Aeronautics, Rail & Transit
PROJECT-TITLE / NAME	Public Transit Bus & Facility Matching Funds

**Capital Budget Request**

Site Acquisition (a)	
Site Improvement / Preparation (b)	
Construction (c)	
Utilities (d)	
Architect / Engineering (e)	
Computer Systems / Equipment (f)	
Hardware	
Software	
Training	
Service	
Furnish / Equipment (g)	1,241,881
Other (h)	
<b>Total Capital Budget Request</b>	<b>1,241,881</b>

**Other Information**

Total Square Footage: \_\_\_\_\_  
 Estimated Useful Life: 7 Years

**Related Annual Operating Budget Expenditures / Savings Estimates**

	Expenditures	Savings
Permanent Personnel Services (a)		
Other Personnel Services (b)		
Current Expense (c)		
Equipment (d)		
Travel (e)		
Other (f)		
<b>Total Expenditures / Savings Estimates</b>		
Accounting Unit: _____		
Will these amounts be consistent each year?		

**Capital Budget Criteria (See Instructions)**

Requirement Code:	A, B, C or D	<b>B</b>	
Definition Code:	A, B, C, D, or X	<b>C</b>	
Funding Percentages by Source:	G, F, H, O	<b>F</b>	%
G = General	F = Federal	<b>G</b>	100.00%
H = Highway	O = Other	<b>O</b>	%
An Information Technology Project must be part of your IT Plan. Project # _____			

**Project Justification (Be Concise)**

This request provides matching funds for: (1) The acquisition of public transit vehicles, facilities, and infrastructure, including bicycle & pedestrian infrastructure, for local public transit agencies in Manchester, Nashua, Dover-Portsmouth, Derry-Salem, Hanover-Lebanon, Concord, Laconia, Claremont, Berlin-Lancaster-Littleton, and Keene, and (2) the acquisition of vehicles for non-profit agencies that provide transportation for elderly individuals and individuals with disabilities. Federal funds provide 80% of the capital needs for transit projects listed above. The requested State Capital match will provide 10% (or 1/2 of the required match if different) and local funds will provide the remaining required match. State participation enables transit providers to leverage Federal capital funds for needed vehicle replacements and facility improvements that might not otherwise be available. Public transportation provides access to jobs and critical services for New Hampshire residents, promoting economic development and mobility for all citizens.

Requested funds will be used to match formula apportioned funds from the Federal Transit Administration grants programs including FTA Section 5339 Capital Bus & Bus Facility Program funds, FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities funds, and FTA Section 5307 Urbanized Area Formula Program funds as well as any discretionary Federal grants made available for transit capital projects. Without State Capital match many transit projects would be delayed due to the inability to raise the required 20% non-federal match on capital projects. Funding for rural transit systems is included in the DOT Operating Budget GL Accounting Unit 2916; Public Transportation, Class 072: Grants Federal. Urban transit systems receive federal funds directly from the Federal Transit Administration and these federal funds and local matching funds are not included on this form.

Contact Name: Patrick C. Herlihy, Director of Aeronautics, Rail and Transit

Telephone Number: 603-271-2449

Name: Victoria F. Sheehan

Commissioner

Date: 5/16/2016



## 2018-2019 Biennium: Public Transit Request

This request provides matching funds for: (1) The acquisition of public transit vehicles, facilities, and infrastructure, including bicycle & pedestrian infrastructure, for local public transit agencies in Manchester, Nashua, Dover-Portsmouth, Derry-Salem, Dover-Lebanon, Concord, Laconia, Claremont, Berlin-Lancaster-Littleton, and Keene, and (2) the acquisition of vehicles for non-profit agencies that provide transportation for elderly individuals and individuals with disabilities. Federal funds provide 80% of the capital needs for transit projects listed above.

Federal funds provide at least 80% of the capital needs for transit projects listed above. The requested State Capital match will provide 10% (or 1/2 of the required match) and local funds will provide the remaining required match. State participation enables transit providers to leverage Federal capital funds for needed vehicle replacements and facility improvements that might not otherwise be available. Public transportation provides access to jobs and critical services for New Hampshire residents, promoting economic development and mobility for all citizens. Requested funds will be used to match formula apportioned funds from the Federal Transit Administration grants programs including FTA Section 5339 Capital Bus & Bus Facility Program funds, FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities funds, and FTA Section 5307 Urbanized Area Formula Program funds. Without State Capital match many transit projects would be delayed due to the inability to raise the required non-federal match on capital projects. Funding for rural transit systems are included in the DOT Operating Budget GL Accounting Unit 2916; Public Transportation, Class 072: Grants Federal. Urban transit systems receive federal funds directly from the Federal Transit Administration and these federal and local matching funds for urban transit systems, totaling \$6,002,654 and are not in the DOT Operating Budget.

2018-219 Biennium		State Capital Funds Requested	Local Match Required	Federal Funds Leveraged	Total Project Costs
CART	2 ADA paratransit vehicles	\$ 20,000	\$ 20,000	\$ 160,000	\$ 200,000
COAST	11 heavy-duty midlife vehicle overhauls, 2 45' used motor coaches, 2 ADA accessible minivans, 10 bus shelters	\$ 76,750	\$ 76,750	\$ 614,000	\$ 767,500
Manchester Transit	4 30' heavy-duty transit buses, 5 12&2 ADA paratransit buses	\$ 368,667	\$ 368,667	\$ 2,949,338	\$ 3,686,672
Nashua Transit	4 30' heavy-duty transit buses, 1 ADA paratransit bus	\$ 201,544	\$ 201,544	\$ 1,612,355	\$ 2,015,444
Advance Transit	4 35' heavy-duty low floor buses, 4 30' medium-duty transit buses, 1 ADA paratransit bus, 5 bus shelters	\$ 256,078	\$ 256,078	\$ 2,048,626	\$ 2,560,782
Belknap-Merrimack Community Action Program (Concord Area Transit & Winnepesaukee Transit)	1 30' medium-duty bus, 3 ADA paratransit buses	\$ 46,441	\$ 46,441	\$ 371,530	\$ 464,412
Community Alliance Transportation Services	2 accessible cutaway vehicles & 2 accessible vans	\$ 24,000	\$ 24,000	\$ 192,000	\$ 240,000
Tri-County Community Action Program (North Country Transit & Carroll County Transit)	5 small cutaway transit buses & 1 24-passenger medium-duty transit bus	\$ 58,900	\$ 58,900	\$ 471,200	\$ 589,000
VNA @ HCS (Keene)	3 27' transit buses	\$ 19,500	\$ 19,500	\$ 156,000	\$ 195,000
Public Transit Bike-Ped infrastructure	Bicycle & pedestrian infrastructure improvements including bicycle racks, passenger shelters, way finding signage, curb cuts for improved accessibility	\$ 20,000	\$ 20,000	\$ 160,000	\$ 200,000
Statewide 5310 providers	10% match for vehicles to be solicited through statewide (open solicitation) for non-profits providing service to seniors & individuals with disabilities (approximately 20-24 vehicles)	\$ 150,000	\$ 150,000	\$ 1,200,000	\$ 1,500,000
<b>Total</b>		<b>\$ 1,241,881</b>	<b>\$ 1,241,881</b>	<b>\$ 9,935,048</b>	<b>\$ 12,418,810</b>

**Total funds requested for the 2018-2019 Biennium:**

**\$1,241,881**

**Total vehicles requested for 2018-2019 Biennium:**

**77 (approximately)**





2004 Bus corrosion underneath



2004 Bus w/ corrosion on entry door



2004 Gillig exterior



2004 Bus w/ corrosion on frame





2003 Orion Bus



2003 Orion Bus



2011 Cutaway Paratransit--rust



2003 Orion Bus



Various Public Transit Agencies



Community Alliance: 2010 Startrans rust & high mileage



Keene City Express: 2007 bus with 125,000+ miles



CART Bus Salem-Derry: 2009 Arboc with 150,000+ miles and 7.1 mpg



Tri-County CAP Berlin: 2008 Ford w/high mileage & wear & tear

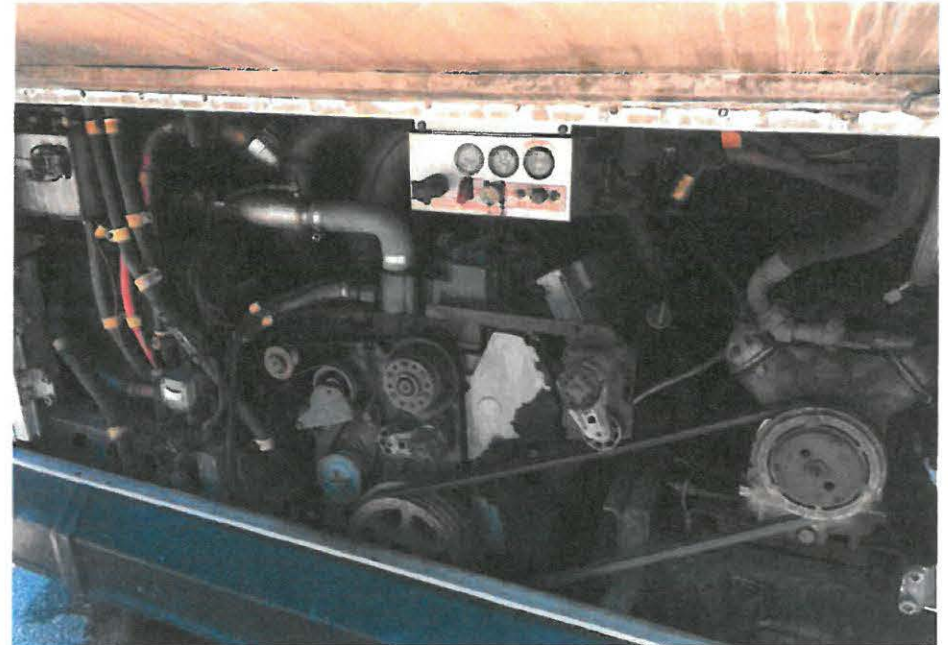




2009 ADA paratransit minivan with 220,000+ miles



Interior of city bus to be overhauled



Engine to be overhauled

Manchester Transit Authority (MTA)



2006 Gillig bus with cosmetic repairs made, but heavy daily use and wear & tear



2009 ADA paratransit bus with cosmetic repairs made, but heavy daily use and wear & tear



# Highway Fund HB25 Section 2 II-A

FORM 1A

## STATE OF NEW HAMPSHIRE

### CAPITAL IMPROVEMENT PROJECT REQUEST

FISCAL YEARS 2018-2019

PRIORITY # 1

	CODE	NAME
AGENCY	096	New Hampshire Department of Transportation
ACTIVITY / DIVISION	960515	Highway Maintenance District 1
PROJECT-TITLE / NAME		Lisbon 114 - New Patrol Shed Facilities

#### Capital Budget Request

Site Acquisition (a)	
Site Improvement / Preparation (b)	350,000
Construction (c)	1,600,000
Utilities (d)	30,000
Architect / Engineering (e)	100,000
Computer Systems / Equipment (f)	
Hardware	
Software	
Training	
Service	
Furnish / Equipment (g)	
Other (h)	
<b>Total Capital Budget Request</b>	<b>2,080,000</b>

#### Other Information

Total Square Footage:	6400 sf
Estimated Useful Life:	25

#### Related Annual Operating Budget Expenditures / Savings Estimates

	Expenditures	Savings
Permanent Personnel Services (a)		
Other Personnel Services (b)		
Current Expense (c)		
Equipment (d)		
Travel (e)		
Other (f)		42,812
<b>Total Expenditures / Savings Estimates</b>		<b>42,812</b>
Accounting Unit:	3007 Highway Maint.	
Will these amounts be consistent each year?		Yes

#### Capital Budget Criteria (See Instructions)

Requirement Code: , C or D	A	
Definition Code: , D, or X	A	
Funding Percentages by Source:	F, H, O	
G = General	F = Federal	G, F, H, O
H = Highway	O = Other	G, F, H, O
An Information Technology Project must be part of your IT Plan. Project #	⇒	

#### Project Justification (Be Concise)

Construct new Highway Maintenance Patrol Section Facilities in Lisbon, including patrol shed and salt shed. Constructed in 1902, this facility does not meet current building codes, is obsolete, potentially unsafe, and is NOT energy efficient. Due to its historic significance, this structure is not a candidate for renovation. The new facilities can be sited on the existing lot due to the recent acquisition of the adjacent lot.

Preliminary Plans: Attach a schematic and location sketch when applicable on an 8-1/2" x 11" sheet.

Contact Name: Philip Beaulieu - District 1 Engineer Telephone Number: 788-4641  
Name: Victoria F. Sheehan Commissioner Date: 5/16/16

**1) Why the project is necessary:**

The existing PS114 Lisbon facility was constructed in 1902 and is obsolete, potentially unsafe, not energy efficient and is under sized to meet level of service requirements. The current facility includes 1-bay vehicle storage that doesn't accommodate a state truck with wing installed, 1-room crew quarters and salt storage. Current facility is not capable of storing current maintenance vehicles and does not meet current building codes. The proposed new facility can be sited on the existing property. Utility and computer system upgrades are included.

The current salt storage is located in one bay of the building with insufficient capacity to store at least 1-years' worth of salt. The floor of the salt bay is below the exterior ground level creating issues with drainage at the entrance to the bay.

**2) What the project is replacing or adding on to:**

This project will construct a new right-sized facility that will include crew quarters, bathrooms, foremen office, and vehicle storage bays for trucks. The crew currently includes 5 full-time NH DOT District 1 employees with (3) 3-5 Ton plow trucks. The current facility is too small to allow for crew members to take a break without using space not intended for that purpose. The current facility has one crew space and the foreman uses a portion of the crew quarters as an office which is not secure or conducive for employee relations.

In the winter, only 1 plow truck can be stored inside with the other trucks stored outside. Trucks equipped with dry rock salt pre-wet systems can freeze-up when stored outside. Newer plow trucks equipped with vehicle emissions controls can also have temperature related issues if not stored in an above freezing environment.

Existing facility will be demolished as part of the project and was determined to have no adverse effect on historic properties.

**3) A brief description of what the project includes**

The project will include an 80-ft. by 80-ft. building that meets current building code requirements. Architectural/engineering analyses will define the building dimensions and utility accommodations similar to recent replacement NH DOT Highway Maintenance Facilities.

The project will also include a 70'x55' salt storage building using the standard DOT design to reduce engineering costs and sized to store at least 1-year of salt.

**4) Any back up information**





Photo 1: View of backside of building showing the salt storage bay (open) and vehicle storage bay (with garage door). Also visible is a significant crack in the exterior masonry wall near the bay opening.

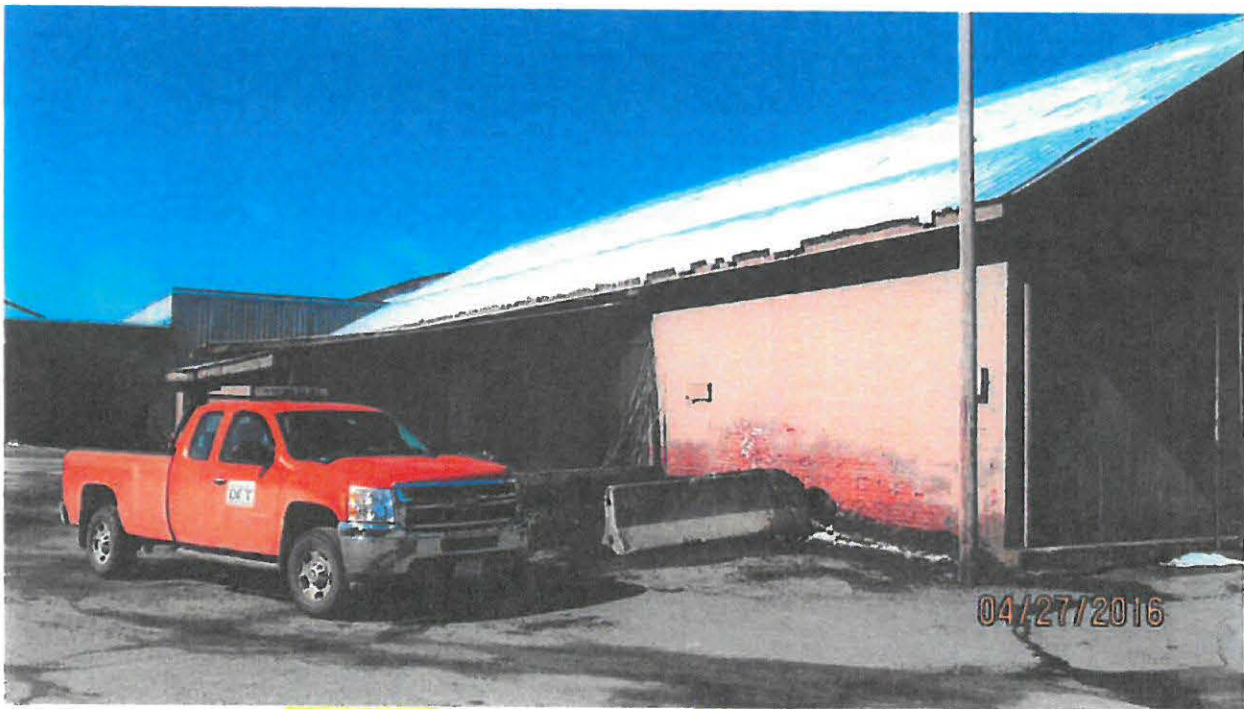


Photo 2: View of backside of building at the end near entrance to crew quarters showing significant damage.

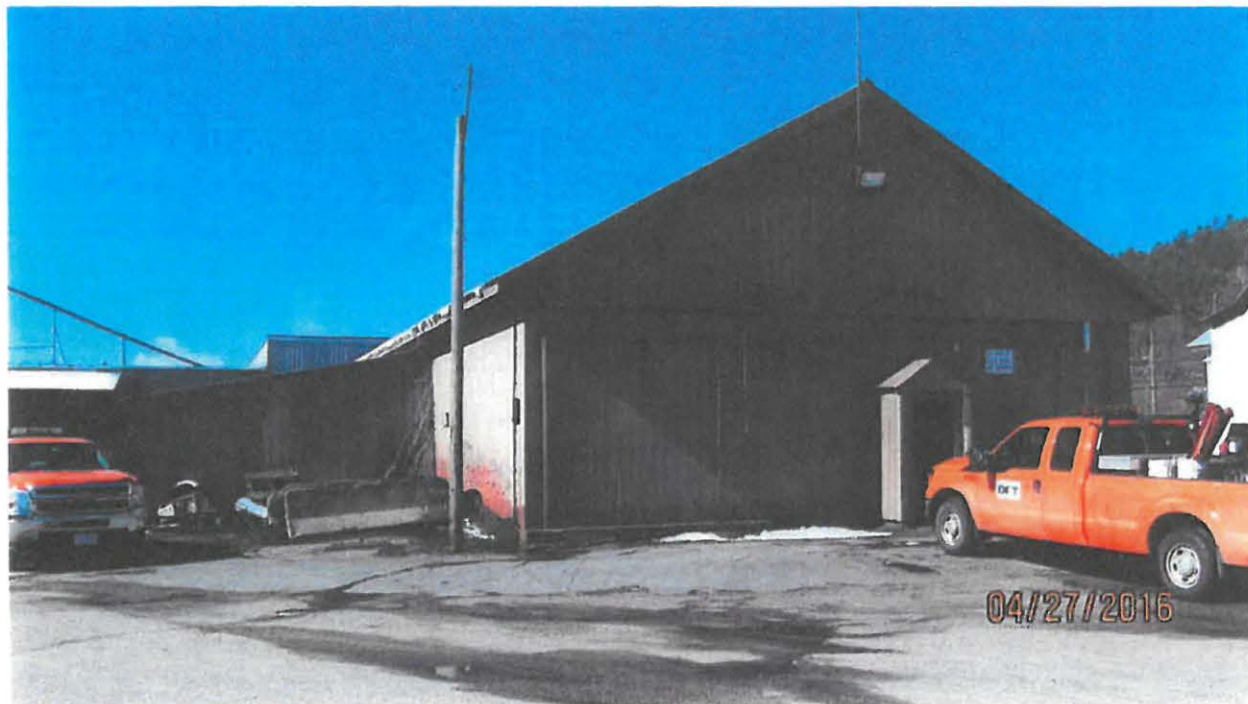


Photo 3: View of the front end of the building and entrance into the crew quarters.



**STATE OF NEW HAMPSHIRE**  
**CAPITAL IMPROVEMENT PROJECT REQUEST**  
**FISCAL YEARS 2018-2019**

PRIORITY # **2**

*Section 2 II-B*

FORM 1A

	CODE	NAME
AGENCY	096	New Hampshire Department of Transportation
ACTIVITY / DIVISION	960515	Operations
PROJECT-TITLE / NAME		Statewide - Underground Fuel Tank Replacement

Capital Budget Request	
Site Acquisition (a)	
Site Improvement / Preparation (b)	
Construction (c)	1,900,000
Utilities (d)	
Architect / Engineering (e)	100,000
Computer Systems / Equipment (f)	
Hardware	
Software	
Training	
Service	
Furnish / Equipment (g)	
Other (h)	
<b>Total Capital Budget Request</b>	<b>2,000,000</b>

Other Information	
Total Square Footage:	
Estimated Useful Life:	30

Related Annual Operating Budget Expenditures / Savings Estimates		
	Expenditures	Savings
Permanent Personnel Services (a)		
Other Personnel Services (b)		
Current Expense (c)		
Equipment (d)		
Travel (e)		
Other (f)		
<b>Total Expenditures / Savings Estimates</b>		
Accounting Unit:		
Will these amounts be consistent each year?		

Capital Budget Criteria (See Instructions)		
Requirement Code: B, C or D	A	
Definition Code: C, D, or X	D	
Funding Percentages by Source:	H	100.00%
G = General		
F = Federal		
H = Highway		
O = Other		
An Information Technology Project must be part of your IT Plan. Project #		

**Project Justification (Be Concise)**

The NH Department of Transportation currently has 40 fuel sites that have underground storage tanks and appurtenances. As the sites get beyond the life expectancy of the tanks and components, the potential for environmental issues, compliance and extensive repairs increases considerably. Prior Capital Improvement Projects (CIP) provided funding to bring many sites into environmental compliance; this CIP request continues that effort to replace the oldest and highest risk sites and to make structural improvements to sites near mid-life to prolong those sites' life span and to minimize potential environmental issues. Currently, 6 sites are planned for scheduled replacement with an average cost of \$325K.

Preliminary Plans: Attach a schematic and location sketch when applicable on an 8-1/2" x 11" sheet.

Contact Name: Caleb Dobbins - State Maintenance Engineer Telephone Number: 271-2693  
 Name: Victoria F. Sheehan Commissioner Date: 5/16/16

**1) Why the project is necessary:**

The NH Department of Transportation currently has 40 fuel sites that have underground storage tanks and appurtenances that are 25 years or older. As the sites get beyond the warranty and life expectancy of the tanks and components, the potential for environmental issues and extensive repairs increases considerably. Prior Capital Improvement Projects (CIP) provided funding to bring many sites into environmental compliance; this CIP request continues that effort to replace the oldest and highest risk sites and to make structural improvements to sites near mid-life to prolong those sites' life span and to minimize potential environmental issues.

**2) What the project is replacing or adding on to:**

The project will continue the recapitalization plan of the existing fuel system by reconstructing new fuel sites at different patrol shed locations throughout the state. In most situations the existing fuel site will be removed to accommodate the new tank(s) and appurtenances, however in some locations the existing tank(s) will remain and everything above the tank top will be replaced.

**3) A brief description of what the project includes**

The project will include reconstruction of single product (diesel) and two product (unleaded and diesel) fuel sites. The project will also allow the reconstruction of some sites, except the tank(s), for those sites that are still young enough where a tank top upgrade will extend the site life another 10 to 15 years while reducing the environmental risk considerably. The desire is to perform tank top upgrades and reconstruct as many fuel sites as allowed by available funding, in the respective State Fiscal Years (SFY) while generally keeping with the following priority list:

- 1) SFY 16-17 current available funding ~ \$800,000 – In calendar years (CY) 16-17 perform tank top upgrades (TTU) on Merrimack (UL & DS), Goffstown (DS), Chester (DS), and Chichester (DS); estimated cost \$200,000. In CY 17 perform TTU on Lancaster (UL & DS), Crawford (DS), and Lincoln (UL & DS); estimated cost \$200,000. Reconstruct Salem (UL & DS) in conjunction with the newly planned patrol and salt sheds, estimated cost \$350,000. Total estimated cost \$750,000
- 2) SFY 18-19 requested funding \$2,000,000 – In CY 18 perform (TTU) on Hampton (UL & DS), Canaan (DS), Henniker (DS), Durham (UL & DS & BO), Exeter (DS), and Allenstown (DS), estimated cost \$350,000. Reconstruct Lisbon (DS) in conjunction with the newly planned patrol and salt sheds; estimated cost \$300,000. CY 18 total estimated costs \$650,000. In CY 19 Reconstruct 4 to 5 single diesel sites from the following possible locations – Orford, Rumney, Marlow, Cornish, Greenville, Hollis, Hinsdale, Hancock, Pittsburg, Milan, and Jefferson to include engineering costs; estimated cost \$1,300,000. Total estimated cost \$1,950,000. Other sites may be considered, as conditions dictate at that time.

**4) Any back up information**

1.) DOT is doing ultrasonic testing on steel double wall tanks being removed this year that exceed 25 years old to better assess the physical condition and departments risk with older steel tanks in the ground.

2.) New EPA regulations for tri-annual inspections and integrity (leak) testing of all sumps would require improvements to tank tops and sumps if they don't pass testing. Fuel personnel completed visual inspections of sites without recent tank top upgrades or reconstruction and assessed potential



issues that could be encountered during testing. This evaluation guided the prioritization of tank top upgrades on sites installed between 1993 and 2005.



Photo 1: Chichester – Drive pad with extensive damage and no positive limiting barriers (PLB's) in concrete. Increases risk of water getting into sumps and spills reaching subsurface soils. This is representative of some sites current conditions or potential future conditions without tank top upgrades or replacements.



Photo 2: Merrimack – Piping sump with water in the bottom causing significant damage to the piping components. Tank top upgrades will replace all piping components, sumps, tank pads and drive pads, extending the life of sites and significantly reducing short and long term maintenance requirements.



Photo 3: Dover Turnpikes – Dual product fuel site with undersized drive and tank pads with cracks prior to tank top upgrades in 2015, representative of the layout and condition of many older DOT sites .





Photo 4: Dover Turnpikes – Fuel site after 2015 tank top upgrade with new sumps, manholes, drive pad with PLB's and tank pad.



Photo 5: Northwood – Example of a full tank top upgrade or full replacement for a single dispenser site.

**STATE OF NEW HAMPSHIRE**  
**CAPITAL IMPROVEMENT PROJECT REQUEST**  
 FISCAL YEARS 2018-2019

Section 2 II - C

FORM 1A

PRIORITY # **3**

	CODE	NAME
AGENCY	096	New Hampshire Department of Transportation
ACTIVITY / DIVISION	960515	Highway Maintenance Statewide
PROJECT-TITLE / NAME		Statewide Salt Sheds

**Capital Budget Request**

Site Acquisition (a)	
Site Improvement / Preparation (b)	100,000
Construction (c)	1,400,000
Utilities (d)	
Architect / Engineering (e)	160,000
Computer Systems / Equipment (f)	
Hardware	
Software	
Training	
Service	
Furnish / Equipment (g)	
Other (h)	
<b>Total Capital Budget Request</b>	<b>1,660,000</b>

**Other Information**

Total Square Footage:	Varies
Estimated Useful Life:	25

**Related Annual Operating Budget Expenditures / Savings Estimates**

	Expenditures	Savings
Permanent Personnel Services (a)		
Other Personnel Services (b)		36,661
Current Expense (c)		
Equipment (d)		
Travel (e)		
Other (f)		
<b>Total Expenditures / Savings Estimates</b>		36,661
Accounting Unit:	3007 Highway Maintenance	
Will these amounts be consistent each year?		Yes

**Capital Budget Criteria (See Instructions)**

Requirement Code: , C or D	B	
Definition Code: D, or X	A	
Funding Percentages by Source:	H	100.00%
G = General		
F = Federal		
H = Highway		
O = Other		

An Information Technology Project must be part of your IT Plan. Project #

**Project Justification (Be Concise)**

Currently the Department of Transportation cannot store a season's worth of salt at all patrol shed locations. Ability to store ample amount of material will save funds due to being able to purchase materials and store them when the best price is available. Environmental regulations also require that all salt be stored under cover. Design and construct salt sheds statewide.

**Preliminary Plans: Attach a schematic and location sketch when applicable on an 8-1/2" x 11" sheet.**

Contact Name: Caleb Dobbins - State Maintenance Engineer Telephone Number: 271-2693  
 Name: Victoria F. Sheehan Commissioner Date: 5/16/16



**1) Why the project is necessary:**

The department currently cannot store a season's worth of salt at all patrol shed locations and some sheds are reaching the end of their useful life, requiring significant maintenance to maintain function and safety. The ability to store ample salt will save funds due to being able to purchase materials and store them when the best price is available. Environmental regulations also require that all salt be stored under cover.

The department's standard high arch gambrel design allows delivery of salt to generally occur within the shed due to high door opening, limiting the potential environmental impacts from salt operations.

**2) What the project is replacing or adding on to:**

The project will construct new stand-alone salt buildings at different patrol shed locations throughout the state. In most situations the existing buildings will be demolished to accommodate the new structures, however in some locations the existing structure may remain depending on site layout and condition of the structure.

**3) A brief description of what the project includes**

The project will include construction of stand-alone salt buildings (4,000 sf to 11,500 sf) with lean-to cold storage and/or spreader rack bays on either side as additional alternates within the bidding process. The project will design and construct as many salt sheds as allowed by available funding while generally keeping with the following priority list:

- 1) D2 – Franklin (211) – Medium Shed – Shed is 44 years old and current capacity is 2000 tons. Current usage is almost 1900 tons per year, however the structure is in critical need of replacement to maintain function. Side walls are blown out in some locations and steel supports in roof have shown significant loss due to the corrosive environment.
- 2) D1 – Pinkham (113-P) – Medium Shed – Shed is 52 years old current capacity is 1650 tons. Current usage is around 1500 tons per year, however the structure is in critical need of replacement to maintain function. Roof has holes in many locations, allowing precipitation to get into the salt pile reducing the quality of the salt and creating chunks in the pile.
- 3) D3 – Loudon (316) – Medium Shed – Shed is 30 years old and current capacity is only 1,000 tons. Current usage is around 1050 tons per year and the ten year plan includes multiple projects that will expand sections of the Route 106 corridor and intersections in Loudon that this facility maintains. Replacement is critical to be able to store a years' worth of salt now and into the future as the demands of this corridor increase.
- 4) D1 – Milan (106) – Small Shed – Shed is 42 years old and current capacity is only 500 tons. Annual usage is over 800 tons per year. The limited capacity requires the shed to store some material outside to maintain an adequate amount of material on hand to respond to significant storm events. Replacement is critical to be able to store a years' worth of salt undercover and maintain function due to an aging building.
- 5) D2 – Bristol – Medium Shed – Shed is 45 years old and current capacity is 1500 tons. Annual usage is around 2100 tons per year. Replacement is critical to be able to store a years' worth of salt undercover and maintain function due to an aging building.
- 6) D3 – Orford – Medium Shed – Shed is 40 years old and current capacity is 1700 tons. Annual usage is almost 2200 tons per year. Replacement is critical to be able to store a years' worth of salt undercover and maintain function due to an aging building.

7) D1 – Whitefield – Small Shed – Shed is 31 years old and current capacity is only 500 tons. Annual usage is over 1000 tons per year. Replacement is critical to be able to store a years' worth of salt undercover.

8) D3 – Belmont

**4) Any back up information**

Most recent bid results have shown total construction costs up to \$106 per sf for the departments standard High Arch Gambrel Salt building. Based on these numbers we would estimate anywhere from \$410,000 to \$960,000 for construction depending on the size of the building and addition of side storage buildings.



Photo 1: Franklin 211 – Front Elevation



Photo 2: Franklin 211 – Sidewall starting to blow out and temporary braces installed.



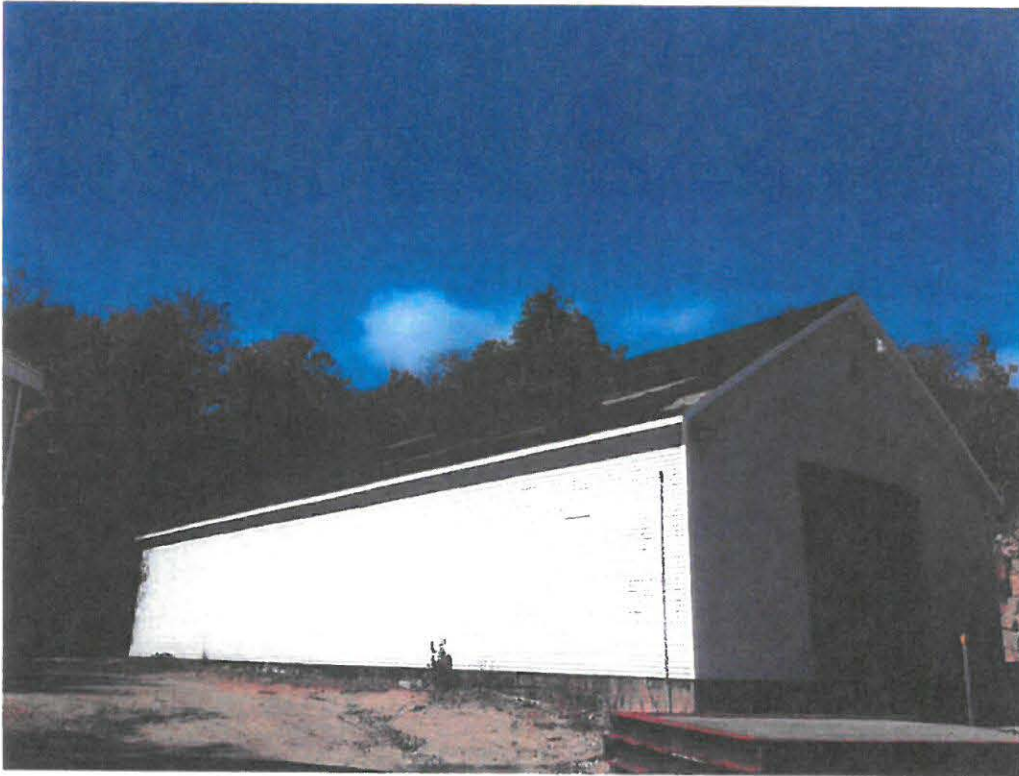


Photo 3: Pinkham 113 – Front and Side Elevation, Roof in disrepair.



Photo 4: Pinkham 113 – Temporary Buttresses supporting bowed rear wall.

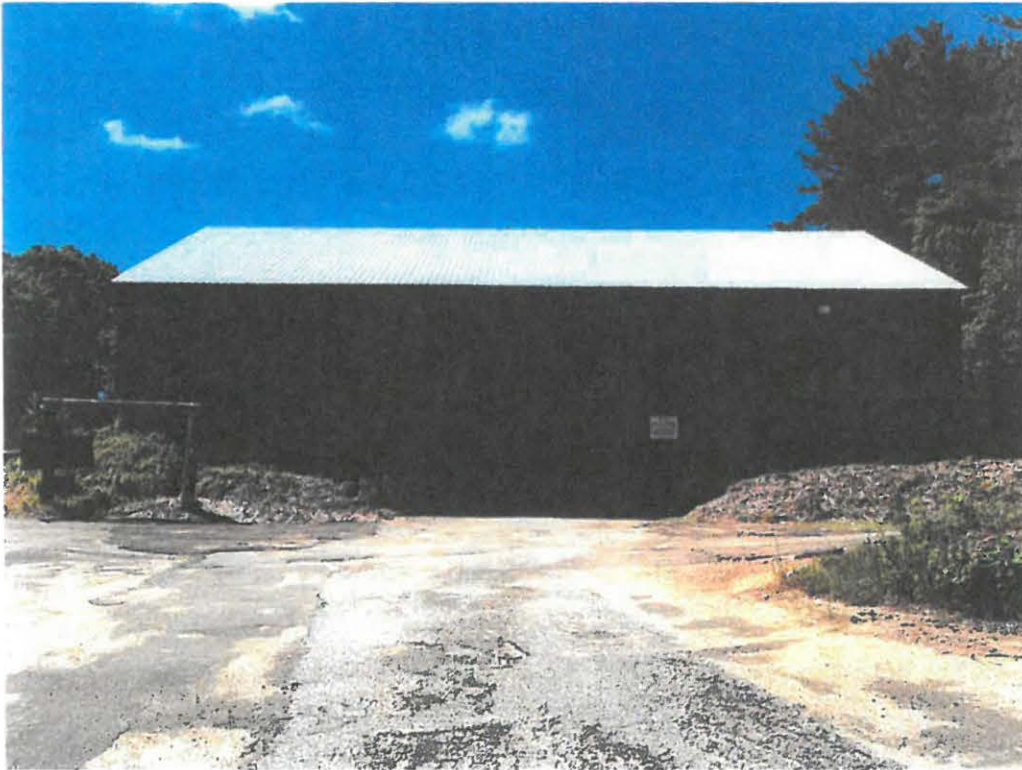


Photo 5: Loudon 316 – Front Elevation.

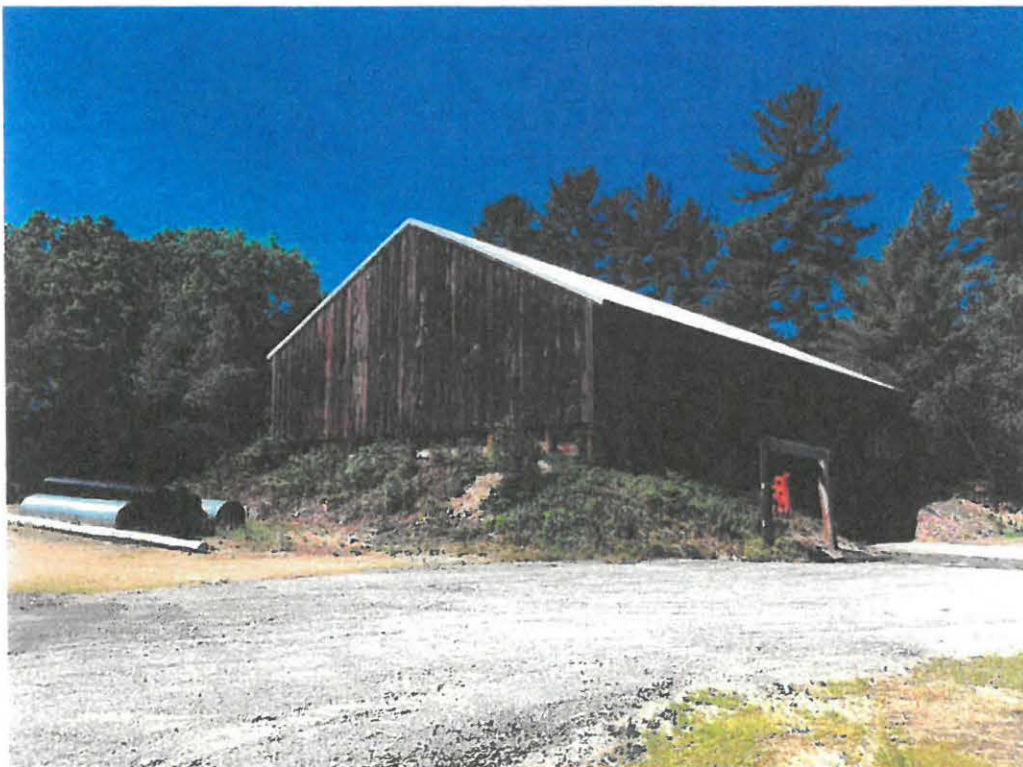


Photo 6: Loudon 316 – Sand fill used to hold push walls in place.



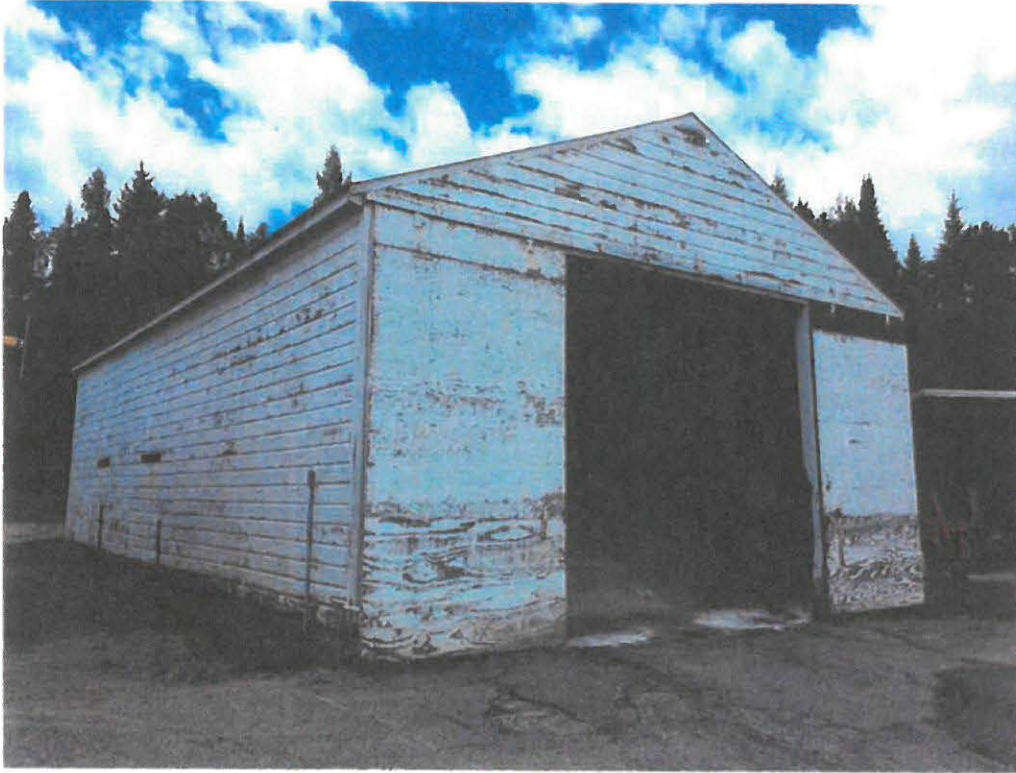


Photo 7: Milan 106 – Front and side elevation.



Photo 8: Milan 106 – Sand fill used to hold failed rear wall in place and makeshift anchors keeping walls in place.

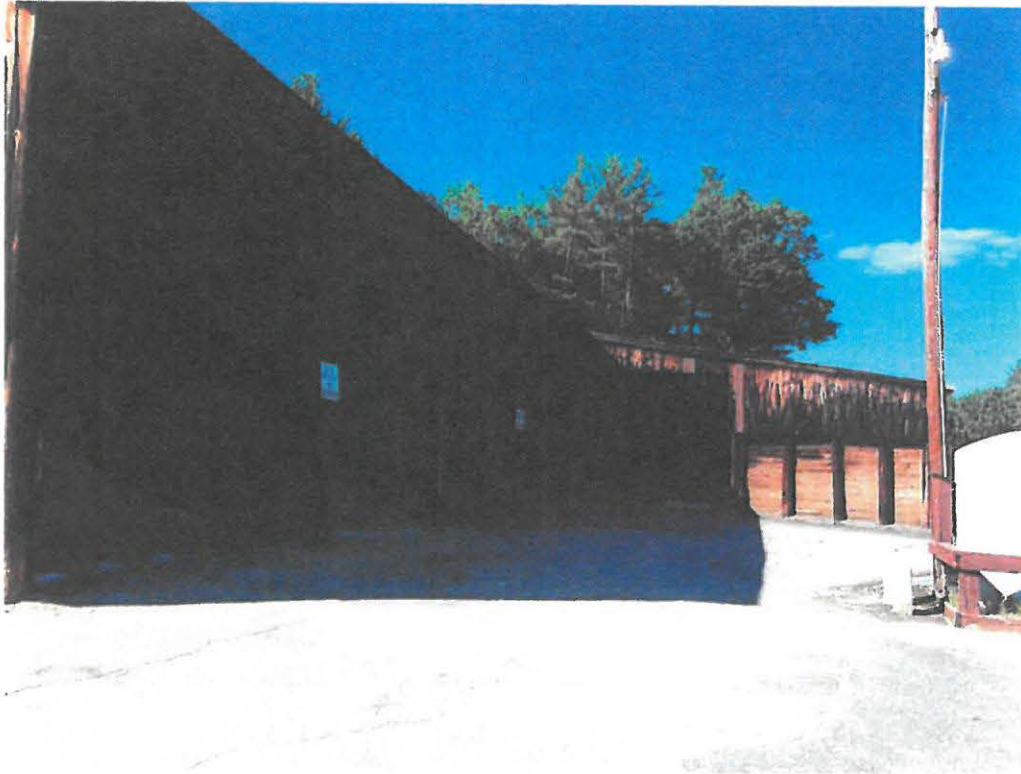


Photo 9: Bristol 206 – Front Elevation



Photo 10: Bristol 206 – Temporary braces holding side and rear walls in place.



**STATE OF NEW HAMPSHIRE**  
**CAPITAL IMPROVEMENT PROJECT REQUEST**  
 FISCAL YEARS 2018-2019

PRIORITY # **4**

Section 2 II-D

FORM 1A

	CODE	NAME
AGENCY	096	New Hampshire Department of Transportation
ACTIVITY / DIVISION	960515	Highway Maintenance District 5
PROJECT-TITLE / NAME		Manchester 527 - Addition to Patrol Shed

**Capital Budget Request**

Site Acquisition (a)	
Site Improvement / Preparation (b)	
Construction (c)	
Utilities (d)	
Architect / Engineering (e)	120,000
Computer Systems / Equipment (f)	
Hardware	
Software	
Training	
Service	
Furnish / Equipment (g)	
Other (h)	
<b>Total Capital Budget Request</b>	<b>120,000</b>

**Other Information**

Total Square Footage:	5,000
Estimated Useful Life:	25

**Related Annual Operating Budget Expenditures / Savings Estimates**

	Expenditures	Savings
Permanent Personnel Services (a)		
Other Personnel Services (b)		
Current Expense (c)		
Equipment (d)		
Travel (e)		
Other (f)		
<b>Total Expenditures / Savings Estimates</b>		
Accounting Unit:		
Will these amounts be consistent each year?		

**Capital Budget Criteria (See Instructions)**

Requirement Code: , C or D	B	
Definition Code: , D, or X	B	
Funding Percentages by Source:	F, H, O	100.00%
G = General	F = Federal	G, F, H, O
H = Highway	O = Other	G, F, H, O
An Information Technology Project must be part of your IT Plan. Project #	⇒	

**Const**

Engineering to construct addition to District 5 Highway Maintenance Patrol Section PS527 facility in Manchester. Current facility is under sized to meet level of service requirements. Current facility is not capable of storing current maintenance vehicles.

Preliminary Plans: Attach a schematic and location sketch when applicable on an 8-1/2" x 11" sheet.

Contact Name: Richard Radwanski - District 5 Engineer  
 Name: Victoria F. Sheehan Commissioner

Telephone Number: 666-3336

Date: 5/16/16

**PROJECT NAME: Manchester 527 – Patrol Shed Renovation/Addition****1) Why the project is necessary:**

The existing PS527 Manchester facility is under sized, to meet level of service requirements especially given the I-93 Expansion project. The existing facility is not capable of storing current maintenance vehicles including brine trucks. The existing facility does not meet modern building codes, is considered obsolete, and potentially unsafe. Recent facility improvements to reduce interior mold formation have significantly improved the facility's energy efficiency. The proposed renovation/addition can be sited on the existing property. Utility and computer system upgrades are included.

**2) What the project is replacing or adding on to:**

This project will construct new crew quarters, bathrooms, foremen office, and two new vehicle storage bays for brine tanker trucks used to pre-treat roadways before a winter storm. The crew currently includes 11 full-time NH DOT District 5 employees which are supplemented for winter maintenance by up to 5 temporary NH DOT borrowed employees, and 8 hired trucks with an operator. The current facility is too small to allow for crew members to take a break without using space not intended for that purpose. The current facility has one bathroom which is not adequate for the regular crew size, and especially in the winter. Currently the foreman uses a closet as an office which is not secure or conducive for employee relations.

In the winter, the brine tanker trucks are stored inside at the PS511 Bedford facility to reduce the potential freeze-up of dispensing systems if stored outside. If a winter storm requires pre-treatment, then the crew needs to bring the operators to Bedford before the work can begin. Trucks equipped with dry rock salt pre-wet systems can freeze-up when stored outside. Newer plow trucks equipped with vehicle emissions controls can also have temperature related issues if not stored in an above freezing environment.

**3) A brief description of what the project includes**

The project will include right-sizing the crew quarters, bathrooms, foremen office to meet current building code requirements. Architectural/engineering analyses will define the addition dimensions and utility accommodations. This addition to the building can be made on the west end of the existing structure.

The addition of 2 truck storage bays to the east end of the current structure is also planned. These will match the current building size and configuration with each bay being approximately 20-feet by 50-feet with an overall addition of approximately 40-ft wide by 50-ft deep. Two overhead garage doors are proposed for each bay to allow for trucks to pull through reducing backing accidents.

No salt storage or spreader storage buildings, or fuel dispensing improvement are proposed.

**4) Any back up information**

Attached are recent photographs of the existing facility for reference.





PS527 Manchester Perspective View Looking East



PS527 Manchester Perspective View Looking North



PS527 Manchester Perspective View Looking West



PS527 Manchester Perspective View Looking South





PS527 Manchester Interior View Looking East



PS527 Manchester Interior View Looking West



PS527 Manchester Interior View Supplemental Crew Quarters with Electrical Panels



PS527 Manchester Interior View Bathroom and crew quarters (for 11 DOT full-time employees + 10 additional employees in winter from hired equipment operators or borrowed NH DOT employees).



**STATE OF NEW HAMPSHIRE**  
**CAPITAL IMPROVEMENT PROJECT REQUEST**  
**FISCAL YEARS 2018-2019**

**PRIORITY #** 5

Section 2 II-E

**FORM 1A**

	CODE	NAME
AGENCY	096	New Hampshire Department of Transportation
ACTIVITY / DIVISION	960515	Highway Maintenance District 1
PROJECT-TITLE / NAME		Dixville 103D - New Patrol Shed Facilities

**Capital Budget Request**

Site Acquisition (a)	
Site Improvement / Preparation (b)	125,000
Construction (c)	735,000
Utilities (d)	15,000
Architect / Engineering (e)	125,000
Computer Systems / Equipment (f)	
Hardware	
Software	
Training	
Service	
Furnish / Equipment (g)	
Other (h)	
<b>Total Capital Budget Request</b>	<b>1,000,000</b>

**Other Information**

Total Square Footage:	3500 sf
Estimated Useful Life:	25

**Related Annual Operating Budget Expenditures / Savings Estimates**

	Expenditures	Savings
Permanent Personnel Services (a)		
Other Personnel Services (b)		
Current Expense (c)		15,214
Equipment (d)		
Travel (e)		
Other (f)		44,804
<b>Total Expenditures / Savings Estimates</b>		<b>60,018</b>
Accounting Unit: <span style="border: 1px solid black; padding: 0 10px;">3007 Highway Maintenance</span>		
Will these amounts be consistent each year?		Yes

**Capital Budget Criteria (See Instructions)**

Requirement Code: , C or D	<b>B</b>	
Definition Code: , D, or X	<b>A</b>	
Funding Percentages by Source: F, H, O	<b>H</b>	<b>75.00%</b>
G = General F = Federal G, F, H, O	<b>O</b>	<b>25.00%</b>
H = Highway O = Other G, F, H, O		

An Information Technology Project must be part of your IT Plan. Project # ⇒

**Project Justification (Be Concise)**

Construct new Highway Maintenance Patrol Section Facilities in Dixville. The current facilities need to be relocated to a new location to accommodate the planned redevelopment of the Balsams resort in Dixville. The department has received a grant from the Northern Border Regional Commission to pay 25% up to \$250,000 of the relocated cost of the relocated facility.

**Preliminary Plans: Attach a schematic and location sketch when applicable on an 8-1/2" x 11" sheet.**

**Contact Name:** Philip Beaulieu - District 1 Engineer **Telephone Number:** 788-4641  
**Name:** Victoria F. Sheehan **Commissioner** *[Signature]* **Date:** 5/16/16

**1) Why the project is necessary:**

The existing facilities need to be relocated to a new location to accommodate the planned redevelopment of the Balsams Resort in Dixville. The patrol shed is a satellite facility for the Errol 103 patrol shed, however is critical to the Departments ability to maintain current winter service levels along NH 26 on each side of Dixville Notch due to the severe winter weather in this patrol area.

The department has received a grant from the Northern Border Regional Commission to pay 25% up to \$250,000 of the costs for a relocated facility.

**2) What the project is replacing or adding on to:**

This project will construct a new right sized facility that will include vehicle storage bays for at least 2 trucks, crew quarters, bathroom and office space. The project will also include a new salt shed to accommodate storage of at least 1-years' worth of salt. The facilities will be located on a new property and will require some site work to develop the new parcel.

**3) A brief description of what the project includes**

The project will include an approximately 3,000sf maintenance building that meets current building code requirements and about 2,500sf salt building. Architectural/engineering analyses will define the building dimensions and utility accommodations similar to recent replacement NH DOT Highway Maintenance Facilities.

**4) Any back up information**

Photo 1: View of front corner of existing building.



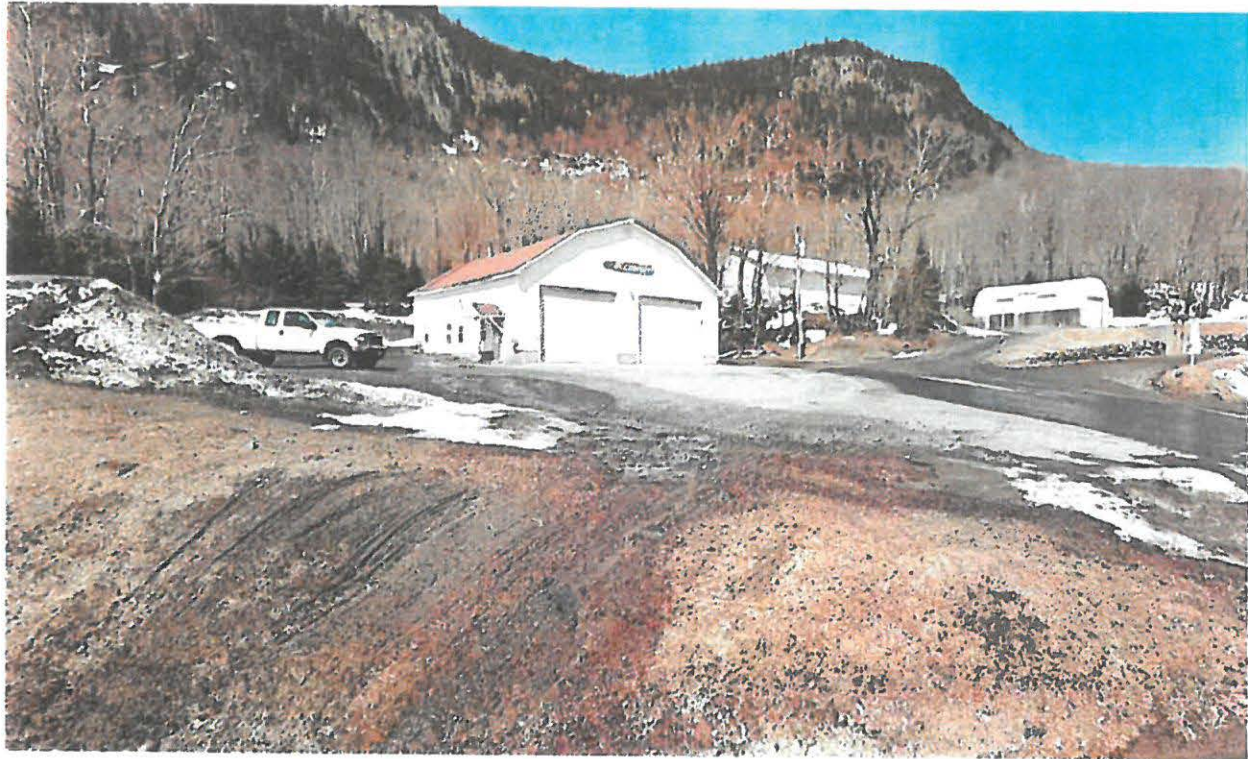


Photo 2: View of front of existing facility looking from country club road.